

REMARKS

The Applicant has carefully reviewed the Office Action dated July 27, 2005. Claims 34-38, 44-46, and 51-62 are pending. Claims 34-38, 44-46, 51-54, 56, 57, 59, 60 and 62 were rejected, claims 55 and 58 were objected to, and claim 61 has been allowed. Claims 46, 52, 56, 59 and 62 have been amended, and a replacement Figure 1 has been submitted. Claims 39-43 and 47-50 were previously cancelled. No new matter has been added as a result of these amendments. Reconsideration, reexamination and allowance of the pending claims are respectfully requested.

As an initial matter, Applicant understands that a photograph is acceptable only for examination purposes unless a petition is filed under 37 C.F.R. 1.84(a)(2). A replacement drawing has been submitted in place of the photograph originally filed as Figure 1. Applicant respectfully requests that the formal drawings be accepted in light of this replacement drawing.

Claims 56, 59 and 62 were objected to under 37 C.F.R. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Although Applicant respectfully disagrees with the rejection of these claims, the claims have been amended. With these amendments, Applicant respectfully asserts that the grounds for this objection have been eliminated. One area of the specification that shows support for these amendments is page 9, line 23.

Claims 34-38, 44-46 and 51-53 were rejected under 35 U.S.C. §102(b) as being anticipated by Grutza et al., U.S. Patent no. 3,965,623 (hereinafter "Grutza"). Applicant respectfully traverses this rejection. In order for a reference to anticipate a claim, each and every element of the claim must be disclosed in the reference. *See* M.P.E.P. § 2131.

Independent claims 34, 46 and 53 recite the use of a hand rotary grinder or a hand held cutting means. Applicants assert that at least this element of these independent claims is missing from the Grutza disclosure. Grutza discloses a method for trueing commutators and slip rings. The Office Action asserts that the Grutza disclosure contains references to a hand held rotary grinder (in col. 1, line 64 through col. 2, line 3 and in col. 6, lines 38-43). However, the cited language of col. 1 through col. 2 refers only to a portable grinder assembly. No mention is made of a handheld rotary grinder. A portable device is not equivalent to a handheld device. To give a concrete example, a common personal computer (PC) is portable, in a sense that most people can

pick up a standard PC and move it to a new location. However, PC's are not generally put in the category of being handheld. Thus, the Applicant asserts that this reference to a portable device does not anticipate the independent claims of this application. The remainder of the Grutza disclosure reinforces this assertion. Nowhere in the disclosure is there a reference to an operator holding this equipment in his hand while operating the equipment, and thus the Grutza disclosure does not contain a reference to a hand held rotary grinder.

Further, the language from column 6 that was cited in the Office Action also does not disclose a hand held rotary grinder. The paragraph from lines 38 through 43 refers to a polishing grade wheel and separately refers to a hand held polishing stone. First, this paragraph mentions a polishing grade wheel, not a grinder in general or a handheld rotary grinder specifically. The paragraph further mentions a hand held polishing stone. Again, this language does not mention a grinder. Because Grutza does not mention a hand held rotary grinder, Grutza does not disclose each and every element of independent claims 34, 46 and 53, and the Applicant therefore respectfully asserts that Grutza does not anticipate these claims. Because they are dependent on claims 34, 46 and 53, and because they recite additional patentably distinct elements, Applicant asserts that dependent claims 35-38, 44-45 and 51-52 are also allowable. In addition, Applicant asserts that amended claims 55 and 58 are also allowable because they are dependent on allowable claims 34 and 46, and because they recite additional patentably distinct elements.

Claims 46 and 52 have also been amended. Amended independent claim 46 now recites a method wherein a groove is formed using a hand held rotary grinder around the outer peripheral surface of a cylindrically shaped collector ring. Grutza does not disclose at least these elements of claim 46. Not only does the disclosure of Grutza lack a hand held rotary grinder, but the grooves in the embodiments described in the invention of Grutza are formed horizontally across the face of the electrical generating equipment, not around a peripheral surface. For an example of the grooves being horizontal and not around the periphery, see Figures 1 and 2. Nothing in the Grutza disclosure describes a method of forming a groove around the periphery of a cylindrical surface with a hand held rotary grinder. Thus, independent claim 46 is not anticipated by Grutza, and Applicant asserts that the claim is allowable. Because they depend on allowable claim 46 and because they recite additional patentably distinct elements, Applicants assert that dependent claims 51, 52 and 57 are also allowable.

Claims 54, 57 and 60 were rejected under 35 U.S.C. §103(a) as being unpatentable over Grutza in view of Coquillart, U.S. Patent No. 4,439,913. Applicant respectfully traverses this rejection. In order for references to render a claim obvious, the references must teach or suggest all of the limitations of the claim (*see* M.P.E.P. §2143.03) and the references must contain some suggestion or motivation to combine the references (*see* M.P.E.P. §2143.01).

As mentioned above, each and every element of independent claims 34 and 46 is not disclosed in Grutza. Specifically, at least the hand held rotary grinder is not disclosed in Grutza. Also, the formation of a groove around the peripheral surface of a cylindrical collector ring, as recited in independent claim 46, is not disclosed in Grutza. Coquillart does not supply these missing elements. Because this combination of references does not teach or suggest each and every element of these independent claims, it also does not teach or suggest all of the limitations of dependent claims 54 or 57. Because the cited references do not teach or suggest each and every element of these claims, the Applicant respectfully asserts that claims 54 and 57 are not obvious in light of the combination of Grutza and Coquillart, and these claims are allowable.

In addition, Grutza and Coquillart do not contain a suggestion or motivation to modify the references. The methods described in these disclosures are of a very different nature, and one of ordinary skill in the art would not be motivated to combine them. The embodiments of the invention described in Grutza describe a process of reconditioning the entire face of a commutator that has horizontal grooves in it, apparently by grinding across the face of the commutator. Coquillart speaks to a process of cutting small, discrete grooves in a commutator so that strips of insulating material can be placed in the grooves.

Simply put, the disclosure of cutting grooves in a commutator in Coquillart cannot render obvious any and all methods that involve cutting grooves in a collector ring. Some suggestion or motivation must be present in order to combine the references, and here the references are sufficiently different such that no motivation exists. One of ordinary skill in the art who is reading a disclosure of reconditioning the entire surface of a commutator that has horizontal grooves across the surface of the commutator (Grutza) would not think to combine Grutza's method with Coquillart's disclosure of discrete grooves cut in the commutator for the purpose of placing insulating material in the commutator, resulting in the current invention of cutting grooves around the outer periphery of a collector ring using a hand held rotary grinder.

The fact that the references can be combined is not sufficient. *See* M.P.E.P. §2143.01. There must be some suggestion or motivation to do so, and the Applicant respectfully asserts that this suggestion or motivation has not been supplied, as is required in order to show a *prima facie* case of obviousness. Because no suggestion or motivation exists for combining these references and because the references do not contain each and every element of the current claims, this combination cannot render claims 54, 57 or 60 obvious, and the Applicant respectfully asserts that these claims are allowable.

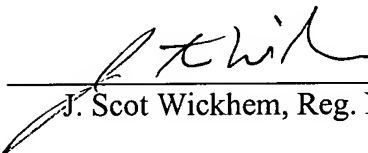
Applicant further asserts that amended claims 62 is also allowable because it is dependent on allowable claim 61, and because it contains additional patentably distinct elements.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,
DAVID L. CUTSFORTH

By his attorney,

Date: October 7, 2005



J. Scot Wickhem, Reg. No. 41,376

CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, Minnesota 55403-2420
Telephone: (612) 677-9050
Facsimile: (612) 359-9349

Attachment: 3 Replacement Drawing Sheets

Amendments to the Drawings

The attached sheets include a replacement drawing for Fig. 1. This replacement drawing is to take the place of the original photograph that was submitted with the application.

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